

(6) The kits must include sufficient absorbent material to completely absorb the contents of any liquid hazardous materials contained in the kits. The contents must be separated, placed, or packed, and closed with cushioning material to protect them from damage; and

(7) The contents of the kits must be packed so there will be no possibility of the mixture of contents causing dangerous evolution of heat or gas.

(d) *Exceptions.* (1)(i) Chemical kits and first aid kits are eligible for the excepted quantity exceptions provided in §§173.4 and 173.4a of this part. For transportation by aircraft, chemical kits and first aid kits are eligible for the limited quantity provisions provided in §173.27(f) of this part. For inner packaging quantity limits, see §173.27(f), Table 3.

(ii) A package conforming to the provisions of this section is not subject to the shipping paper requirements of subpart C of part 172 of this subchapter, unless the material meets the definition of a hazardous substance, hazardous waste, marine pollutant, or is offered for transportation and transported by aircraft or vessel. Chemical kits and First aid kits conforming to this section may be marked as a limited quantity as prescribed in §172.315 of this subchapter and, if applicable, are eligible for the exceptions provided in §173.156 of this part. Additionally, chemical and first aid kits conforming to this section are not subject to part 174 (carriage by rail) or part 177 (carriage by highway) of this subchapter when marked in accordance with §172.315 of this subchapter.

(2) Consumer commodities. Until December 31, 2013, a limited quantity package containing a “consumer commodity” as defined in §171.8 of this subchapter may be renamed “Consumer commodity” and reclassified as ORM-D or, until December 31, 2012, ORM-D-AIR material and offered for transportation and transported in accordance with the applicable provisions of this subchapter in effect on October 1, 2010.

(3) Kits that are carried on board transport vehicles for first aid or operating purposes are not subject to the requirements of this subchapter.

[76 FR 3375, Jan. 19, 2011]

#### § 173.162 Gallium.

(a) Except when packaged in cylinders or steel flasks, gallium must be packaged in packagings which meet the requirements of part 178 of this subchapter at the Packing Group I performance level for transportation by aircraft, and at the Packing Group III performance level for transport by highway, rail or vessel, as follows:

(1) In combination packagings intended to contain liquids consisting of glass, earthenware or rigid plastic inner packagings with a maximum net mass of 15 kg (33 pounds) each. The inner packagings must be packed in wood boxes (4C1, 4C2, 4D, 4F), fiberboard boxes (4G), plastic boxes (4H1, 4H2), fiber drums (1G) or removable head steel and plastic drums or jerricans (1A2, 1H2, 3A2 or 3H2) with sufficient cushioning materials to prevent breakage. Either the inner packagings or the outer packagings must have an inner liner that is leakproof or bags of strong leakproof and puncture-resistant material impervious to the contents and completely surrounding the contents to prevent it from escaping from the package, irrespective of its position.

(2) In packagings intended to contain liquids consisting of semi-rigid plastic inner packagings of not more than 2.5 kg (5.5 pounds) net capacity each, individually enclosed in a sealed, leak-tight bag of strong puncture-resistant material. The sealed bags must be packed in wooden (4C1, 4C2), plywood (4D), reconstituted wood (4F), fiberboard (4G) or plastic (4H1, 4H2) boxes or in fiber (1G) or steel (1A2) drums, which are lined with leak-tight, puncture-resistant material. Bags and liner material must be chemically resistant to gallium.

(3) Cylinders and steel flasks with vaulted bottoms are also authorized.

(b) When it is necessary to transport gallium at low temperatures in order to maintain it in a completely solid state, the above packagings may be overpacked in a strong, water-resistant outer packaging which contains dry ice or other means of refrigeration. If a refrigerant is used, all of the above materials used in the packaging of gallium must be chemically and physically resistant to the refrigerant and must

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have impact resistance at the low temperatures of the refrigerant employed. If dry ice is used, the outer packaging must permit the release of carbon dioxide gas.

(c) Manufactured articles or apparatuses, each containing not more than 100 mg (0.0035 ounce) of gallium and packaged so that the quantity of gallium per package does not exceed 1 g (0.35 ounce) are not subject to the requirements of this subchapter.

[64 FR 10777, Mar. 5, 1999; as amended at 66 FR 33430, June 21, 2001]

### § 173.163 Hydrogen fluoride.

(a) Hydrogen fluoride (hydrofluoric acid, anhydrous) must be packaged as follows:

(1) In specification 3, 3A, 3AA, 3B, 3BN, or 3E cylinders; or in specification 4B, 4BA, or 4BW cylinders except that brazed 4B, 4BA, and 4BW cylinders are not authorized. The filling density may not exceed 85 percent of the cylinder's water weight capacity. In place of the periodic volumetric expansion test, cylinders used in exclusive service may be given a complete external visual inspection in conformance with part 180, subpart C, of this subchapter, at the time such requalification becomes due.

(2) In a UN cylinder, as specified in part 178 of this subchapter, having a minimum test pressure of 10 bar and a maximum filling ratio of 0.84.

(b) A cylinder removed from hydrogen fluoride service must be condemned in accordance with § 180.205 of this subchapter. Alternatively, at the direction of the owner, the requalifier may render the cylinder incapable of holding pressure.

[71 FR 33880, June 12, 2006]

### § 173.164 Mercury (metallic and articles containing mercury).

(a) For transportation by aircraft, mercury must be packaged in packagings which meet the requirements of part 178 of this subchapter at the Packing Group I performance level, as follows:

(1) In inner packagings of earthenware, glass or plastic containing not more than 3.5 kg (7.7 pounds) of mercury, or inner packagings which are glass ampoules containing not more

than 0.5 kg (1.1 pounds) of mercury, or iron or steel quicksilver flasks containing not more than 35 kg (77 pounds) of mercury. The inner packagings or flasks must be packed in steel drums (1A2), steel jerricans (3A2), wooden boxes (4C1), (4C2), plywood boxes (4D), reconstituted wood boxes (4F), fiberboard boxes (4G), plastic boxes (4H2), plywood drums (1D) or fiber drums (1G).

(2) [Reserved]

(3) When inner packagings of earthenware, glass or plastic are used, they must be packed in the outer packaging with sufficient cushioning material to prevent breakage.

(4) Either the inner packagings or the outer packagings must have inner linings or bags of strong leakproof and puncture-resistant material impervious to mercury, completely surrounding the contents, so that the escape of mercury will be prevented irrespective of the position of the package.

(b) Manufactured articles or apparatuses, each containing not more than 100 mg (0.0035 ounce) of mercury and packaged so that the quantity of mercury per package does not exceed 1 g (0.035 ounce) are not subject to the requirements of this subchapter.

(c) Manufactured articles or apparatuses containing mercury are excepted from the specification packaging requirements of this subchapter when packaged as follows:

(1) Manufactured articles or apparatuses of which metallic mercury is a component part, such as manometers, pumps, thermometers, switches, etc. (for electron tubes, mercury vapor tubes and similar tubes, see paragraph (c)(3) of this section), must be in strong outer packagings, having sealed inner liners or bags of strong leakproof and puncture-resistant material impervious to mercury, which will prevent the escape of mercury from the package irrespective of its position. Mercury switches and relays are excepted from these packaging requirements, if they are totally enclosed, leakproof and in sealed metal or plastic units.

(2) Thermometers, switches and relays, each containing a total quantity of not more than 15 g (0.53 ounces) of